WA 6819
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

MAY 15 2009

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Mr. William Ernst
Company Energy & Environmental Affairs
The Boeing Company
P.O. Box 3707
MC 1W-12
Seattle, Washington 98124-2207

Re: Comments on *Phase 3 Interim Measure Work Plan; Removal and Stabilization of PCB-containing Caulk in Concrete Pavements*
Boeing Plant 2, Seattle/Tukwila, Washington
RCRA Docket No. 1092-01-22-3008(h)
EPA ID No. WAD 00925 6819

Dear Mr. Ernst:

The U.S. Environmental Protection Agency Region 10 (EPA) has completed its review of the *Phase 3 Interim Measure Work Plan; Removal and Stabilization of PCB-containing Caulk in Concrete Pavements* (Phase 3 Work Plan or Work Plan) dated April 3, 2009. This Work Plan presents the methodology and schedule for removal of caulk materials containing greater than 50 parts per million (ppm) PCBs and stabilization of caulk materials containing greater than 25 ppm and less than or equal to 50 ppm PCBs in the concrete pavements at the Plant 2 facility in Seattle/Tukwila, Washington.

EPA has the following comments regarding the Phase 3 Work Plan:

1. Section 4.1, *Methodology*, pages 15-16. The Work Plan indicates that the caulk in the 2-10 Area will be removed by sawcutting the seam between the caulk and the concrete and manually removing the caulk from the joint. The caulk in the 2-60s Area, however, will be removed by sawcutting through the concrete approximately six inches from the seam on both sides of the joint, and manually removing the approximately 1-foot wide by 6-inch thick sawcut concrete and caulk. Provide the rationale for utilizing both of these very different approaches.

2. Section 4.1, *Methodology*, pages 15-16. Sections 4.1.1 and 4.1.2 state that concrete joints will be manually cleaned, pressure washed, or mechanically reamed as needed to remove caulk remnants. Provide Standard Operating Procedures (SOPs) for these operations. Describe how you will collect washing fluids, runoff, overspray, and/or dust generated during these operations. Describe the procedures you will employ to prevent further releases of PCBs to the environment during caulk removal operations.

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3. Section 4.1.1, *2-10 Area Caulk Removal*, page 15. This section states that caulk will be removed by "[s]awcutting the seam between the caulk and the concrete on each side of the [3/8 to ½ inch] joint" to a depth of 3 inches (undercutting the caulked portion), manually removing the caulk, and then cleaning the sides of the joint as needed to remove caulk remnants. From your description, it appears that this procedure will not cleanly remove the caulk and may create a problem of widespread dispersal of caulk debris at the site. Provide a detailed description of the equipment and procedure to be employed, including how dispersal of PCB-laden caulk debris will be prevented or contained.

4. Section 4.1.1, *2-10 Area Caulk Removal*, page 15. The Work Plan does not discuss whether PCBs can be expected to have migrated into remaining concrete along the seam. The Work Plan must either be revised to include a plan for conducting confirmation sampling along the newly-exposed concrete edge, or provide a rationale for not conducting such sampling.

5. Section 4.1.1, *2-10 Area Caulk Removal*, page 15. The Work Plan must be revised to include the procedures to be employed after all PCB-laden caulk is removed, for example recaulking these joints with an alternative material.

6. Section 4.1.2, *2-60s Area Caulk Removal*, page 16. The Work Plan does not discuss how the 12-inch by 6-inch sawcuts that will result from caulk removal will be managed. These open sawcuts could provide a transport pathway for contaminants to reach the subsurface if surface water is allowed to infiltrate rather than being appropriately routed to the stormwater collection system. Provide the procedure for managing stormwater and rinsate which will be used until such time as pavement repairs are completed.

7. Section 4.1.3, *2-10 and 2-60s Area Caulk Stabilization*, page 17. This section states that caulk materials will be removed to a depth of at least one inch by manual removal and/or high pressure jetting, but does not include any further definition of these terms. Provide a SOP for "manual removal" or clarify if this refers exclusively to sawcutting described in previous sections. Describe how you will collect fluids, runoff, overspray, and/or dust generated during manual removal and pressure washing. Describe the procedures you will employ to prevent further releases of PCBs to the environment during caulk stabilization operations.

8. Section 4.1.3, *2-10 and 2-60s Area Caulk Stabilization*, page 17. This section states that the minimum thickness of the new sealant will be approximately 1/8 inch. Provide the basis for this thickness, including the sealant's ability to maintain a seal despite traffic, wear and/or erosion.

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William Ernst
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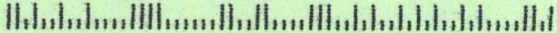

9. Section 4.2, *Operation and Maintenance Plan.* Provide the expected durability of the new sealant. Revise the inspection frequency as needed (every 6 months for the first year, annually thereafter) based upon the expected life of the sealant and the potential for wear or erosion. Note that, in general, inspections of a sealant whose purpose is to stabilize a hazardous constituent should become more frequent as the sealant ages, instead of less frequent.

10. Add a new section to the Work Plan specifying what items will be noted in the field notes during performance of this work. Provide an outline of the contents of the Interim Measure Completion Report and/or Preliminary Report. Describe how you will report any significant deviations from the approved Work Plan.

In accordance with Section X of the January 1994 Administrative Order on Consent, Boeing must revise the Phase 3 Work Plan responsive to all of these comments. Boeing must submit the revised Phase 3 Work Plan including all revisions specified above to EPA within thirty (30) calendar days of receipt of this letter.

Should you have questions or comments, please contact me by phone at 206-553-8506 or by email at brown.christy@epa.gov.

Sincerely,

Christy Brown

Christy Brown
Project Coordinator
Office of Air, Waste and Toxics

cc: Glen St. Amant, Muckleshoot Tribe
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Marla Steinhoff, NOAA
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Revised 03/24/05

ACTION/ROUTING INSTRUCTIONS

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Suzanne Skadowski, ETPA
Christy Brown, AWT

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NAME	BROWN	ZAVALA	ORDINE	YES	NO	YES	NO
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